



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,819	03/15/2006	Dennis M. Dixon	FA1116PCT	4426
7590 07/11/2007 E I du Pont de Nemours & Company Legal Patents Wilmington, DE 19898			EXAMINER NGAMPA, BRIGET P	
			ART UNIT 1709	PAPER NUMBER
			MAIL DATE 07/11/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/567,819

Applicant(s)

DIXON ET AL.

Examiner

Briget P. Ngampa

Art Unit

1709

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1-8 and 10-11 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Emch (U.S. patent number 6,291,027 hereafter '027).

With respect to claim 1: '027 teach process for drying substrates coated with liquid waterborne [col 5, lines 23-25, 56-67] basecoats [col 1, line 22-24], comprising the steps of:

(a) applying a waterborne [col 5, lines 23-25, 56-67] basecoating composition to a surface of the substrate [col 2, line 19-21];

(b) exposing the basecoating composition to air [col 2, line 21] having a temperature ranging from about 10°C to about 35°C [col 2, line 22-23] for a period of about 30 seconds [col 2, line 23]

- to volatilize at least a portion of volatile material from the liquid basecoating composition [col 2, lines 23-25],
- the velocity of the air at a surface of the basecoating composition being about 0.3 to about 4 meter per second [col 6, lines 22-25];

(c) applying heated air to the basecoating composition for a period of about 30 seconds to 2 minutes [col 6, line 53],

- the velocity of the air at the surface of the basecoating composition being about 0.3 to about 4 meters per second [col 8, lines 55-56],
- the air having a temperature ranging from about 25° C to about 50° C [col 8, lines 59-60];

Art Unit: 1709

(d) applying infrared radiation and heated air simultaneously [col 9, lines 22-23] to the basecoating composition for a period from about 30 seconds to 3 minutes [col 9, lines 24-26],

- the velocity of the air at the surface of the basecoating composition being about 1-4 meters per second [col 10, lines 5-8],
- the air having temperature of from about 50°C to about 110°C [col 10, lines 3-4], such that a sufficiently dried basecoat is formed upon the surface of the substrate [col 2, lines 35-36]; and

(e) applying a topcoating composition over the basecoat [col 2, line 36-37].

'027 does not teach the exact combination of ranges in the claimed language; however

it has been established that in the case where the claimed ranges 'overlap or lie inside ranges disclose by the prior art' a prima facie case of obviousness exist.

In re Wertheim, 541 F.2d257, 191 USPQ 90(CCPA 1976). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have chosen the overlapping portion of the ranges in '027 because it is prima facie obvious to select values within the disclosed ranges.

With respect to claim 2, '027 teach all the limitations of claim 1, it further teaches the substrate being metal [col 3, lines 37-38] such as iron [col 3, line 39].

With respect to claim 3, '027 teach all the limitations of claim 2, it further teaches that the metal substrate is an automotive body component [col 3, line 56-59].

With respect to claim 4, '027 teach all the limitations of claim 1; it further teaches that the period in step (b) ranges from at least 30 seconds [col 6, line 14].

With respect to claims 5 and 6, '027 teach all the limitations of claim 1, it further teaches that the infrared radiation applied in step (d) is emitted at a wavelength in the

Art Unit: 1709

near- to intermediate-infrared region ranging from about 0.7 to about 20 micrometers [col 9, line 66], [col 10, line 2].

With respect to claim 7, '027 teach all the limitations of claim 1, it further teaches that the period in step (c) ranges from about 30 seconds to about 3 minutes [col 6, line 53].

With respect to claim 8, '027 teach all the limitations of claim 7, further it teaches the period in step (d) ranges from about 30 seconds to about 3 minutes [col 9, line 25-26].

With respect to claim 10, '027 teach all the limitations of claim 1. It further teaches an additional step of simultaneously curing the basecoating composition and the topcoating composition after application of the topcoating composition [col 11, line 30-33].

With respect to claim 11, '027 teach all the limitations of claim 1. It further teaches that the substrate is a polymeric substrate [col 11, line 59-60] which the peak temperature during the process does not exceed the heat distortion temperature of the polymeric material [col 12, line 28-32].

4. Claim 9 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Emch (U.S. patent number 6,291,027 hereafter '027) in view of Williams et al. (U.S. pub number 2005/00846628 A1, hereafter '628).

With respect to claim 9, '027 teach all the limitations of claim 1; it does not teach the topcoat applied over the basecoat wet on wet. '628 teaches a subsequent coatings on vehicle may be applied wet on wet [0050, lines 1-5]. Therefore, it would have been

Art Unit: 1709

obvious to one of ordinary skills in the art at the time the invention was made to have used a wet on wet process to apply the topcoat of '027 because '678 teaches that wet – on-wet coatings are conventional process in vehicle coating.

5. Claim 12 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Emch (U.S. patent number 6,291,027 hereafter '027) in view of Szlucha (U.S. patent number 6,132,038 B2, hereafter '038).

With respect to claim 12, '027 teach all the limitations of claim 1; it does not teach that the radiation source is microwave energy. '038 teaches that active drying uses infrared and microwave energy [col 2, lines 1-4]. Therefore, it is prima facie obvious to combine two elements each of which is taught by the prior art to be useful for the same purpose (In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980)). It would have been obvious to one of ordinary skill in the art at the time of the invention to use microwave energy in addition to the infrared energy of '027 because they are each recognize as suitable drying techniques.

Double Patenting

6. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Art Unit: 1709

7. Claims 1-12 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-12 of copending Application No. 10,933,752. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Briget P. Ngampa whose telephone number is 571-270-1866. The examiner can normally be reached on M-F, 830-4:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

bpn


MICHAEL B. CLEVELAND
SUPERVISORY PATENT EXAMINER